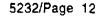


5232/Page 11

## Claims;

- 1. A method for immunoassay with magnetized label and SQUID, which comprising following processes;
  - (1) an analyte is labeled with a magnetic label to detect antigenantibody reaction,
  - (2) the magnetic material label is magnetized by a magnetic field,
  - (3) the magnetized magnetic material label detected by a SQUID which detect a magnetic field having right angle to the magnetic field.
- 2. A method mentioned in claim 1, said magnetic field for magnetization is a static magnetic field.
- 3. A method mentioned in claim 1, said SQUID detects variation of the magnetic field occurred by moving the analyte labeled by magnetized magnetic material.
- 4. A method mentioned in diaim 1, the analyte moves parallel to the magnetic field for magnetization.
- 5. An apparatus for immunoassay with magnetized label and SQUID, which comprising; a magnetic field generation means which generate a magnetic field to magnetize an analyte labeled by antigenantibody reaction with magnetic material label, a SQUID which detects a magnetic field having right angle to the magnetic field generated by the magnetic generation means.
- 6. An apparatus mentioned in claim 5, the magnetic field generated by the generation means is a static magnetic field.





- 7. An apparatus mentioned in claim 5, which comprises a means conveying the analyte to pass trough the detection field of the SQUID.
- 8. An apparatus mentioned in claim 7, the analyte moves parallel to the first magnetic field.
- 9. An apparatus mentioned in claim 5, the magnetic field generation means generates second magnetic field which cancels component of the first magnetic field that is parallel to detecting direction of SQUID.
- 10. An apparatus mentioned in claim 5, the analyte is treated by a support which is sufficiently wide to the detection field of the SQUID.
- oxide superconducting thin film.

and so